

Newborn heart problems surged after Fukushima nuke disaster: Study

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(HealthDay)—There was a significant increase in the number of infants

in Japan who had surgery for complex congenital heart disease after the nuclear accident in Fukushima, a new study finds.

The disaster happened in March 2011 after a tsunami and earthquake hit the Fukushima Daiichi Nuclear Power Plant in Japan, causing a meltdown and release of radioactive materials.

Researchers analyzed data on complex congenital [heart disease](#) operations in children between 2007 and 2014.

In the four years after Fukushima, the number of these operations in infants across Japan increased just over 14 percent. There was no significant increase among 1- to 17-year-old children.

The significant increases were seen in complex congenital heart diseases known to occur during various developmental stages of the heart.

The findings suggest that damage occurred at various times in the early stages of heart development and was not the result of harm to a [single gene](#) at a specific time, according to the authors of the study. It was published March 13 in the *Journal of the American Heart Association*.

The researchers noted that the study does not show a direct cause-and-effect link between the nuclear accident and the incidence of complex congenital heart disease.

"Although this research focuses on events that occurred in Japan, the potential for [nuclear accidents](#) throughout the world is a global health concern," said Kaori Murase, an associate professor in the Graduate School of Natural Sciences at Japan's Nagoya City University.

"Our study suggests that a nuclear accident might increase the risk for complex congenital heart disease," she said in a journal news release.

Complex congenital heart disease occurs in the early stages of fetal development, resulting in complicated and severe symptoms. In many cases, the resulting heart abnormalities can cause lifelong health problems.

Stress to [pregnant women](#)—such as job loss, divorce, marital separation or death of a loved one—is a known risk factor for some complex congenital heart disease. Since such [stress](#) likely occurred during the Fukushima nuclear accident, it may have played an indirect role in the surge of complex congenital heart disease, according to the researchers.

"A nuclear accident is a problem that directly affects the lives of each of us," Murase said. "More research is needed so that health effects from these types of accidents are not minimized."

After the 1986 nuclear accident in Chernobyl, Ukraine, there was a similar rise in [congenital heart disease](#) in neighboring countries, the researchers said in background notes.

More information: The U.S. National Heart, Lung, and Blood Institute has more on [congenital heart defects](#).

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